Proposal for Short Term Training On Machine Learning & DevOps (MLOps)

Date of commencement: 20th June 2024

Machine Learning Operations (MLOps) is often likened to DevOps for machine learning, amalgamating techniques and tools from data engineering, machine learning, software development, and operational practices. This training program aims to equip participants with the skills necessary to automate the lifecycle of machine learning algorithms, which is often desired in production environments, spanning from data curation, initial model training to deployment and retraining against new data.

Duration: 4 weeks(40hr) + Project

Course Fee: Rs. 5000/-(inclusive all taxes)

Eligibility: B. TECH. 2nd Year or 3rd year

Mode: Hybrid Mode (Theory will be in online mode and hands-on in offline mode in university campus)

The training will be structured into four comprehensive sections:

- 1. Data Curation and visualization
- 2. Understanding of Popular ML Algorithms
- 3. Software Development and Cloud integration
- 4. Projects

Pre-requisite:

Basic knowledge of Python and a strong interest in learning and applying new concepts. **Training Outcome:**

Upon successful completion, participants will be able to

1. Translate business objectives into machine learning problems and develop ML operations to address them effectively.

2. Design and develop end-to-end software solutions, establishing contracts and APIs to deliver robust applications.

3. Gain a comprehensive understanding of MLOps principles, tools, and techniques necessary for deploying, managing, and scaling machine learning models in production environments.

Evaluation:

Online class participation will be evaluated through Zoom polling responses during lecture delivery. Hands-on activities in the ML Lab will be assessed through project submissions.

Certificates will be issued to students achieving a score of more than 60%

This training program offers a unique opportunity for participants to enhance their skills in machine learning, software development, cloud integration, and preparing them for the challenges of modern data-driven CI-CD environments.

Instructor:

Dr. Suprava Patnaik Professor, School of Electronics Engineering, Kalinga Institute of Industrial Technology (KIIT)-DU.